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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,258	11/12/2003	Kevin P. Carpenter	39455.83130-001	6858
24335	7590	07/01/2005	EXAMINER	
WARNER NORCROSS & JUDD LLP 900 FIFTH THIRD CENTER 111 LYON STREET, N.W. GRAND RAPIDS, MI 49503-2487			POPE, DARYL C	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,258

Applicant(s)

CARPENTER, KEVIN P.

Examiner

DARYL C. POPE

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 32-40 is/are rejected.
- 7) ☒ Claim(s) 31 and 41-45 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/5/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

ART REJECTION:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Stegman et al(6,788,195).**

-- In considering **claims 1-5**, the claimed subject matter that is met by Stegman et al(Stegman) includes:

- 1) the lamp with operating and preferred current is met by the exterior lights(55) which operate within normal parameters;
- 2) the current sensor is met by sense resistor(54) of each light;
- 3) the processor for comparing is met by the microprocessor(60) which compares the sensor output with preferred lamp current(see: column 5, lines 46-59);
- 4) the display for indicating if the current sensor output is acceptable is met by the visual display(77 which indicates the operating status of the lights(see: column 8, lines 3-7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 6-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stegman et al(Stegman).**

-- With regards to **claims 6-8**, the processor including a memory and storing the current sensor output value in the memory is met by the microprocessor including EEPROM and recording a current threshold based on the measured current at the invocation of the calibration process(see: column 7, lines 56-58).

-- With regards to **claims 9-29**, the A/D converter coupled to the current sensor, producing the current sensor output, and wherein the digital outputs are stored in memory, and the processor computing the output value from the plurality of outputs stored in memory is met by the output signal voltages being scaled and converted into digital signals so as to be processed and inherently stored by the microprocessor(see: column 7, lines 10-18).

Furthermore, with regards to the current sensor output value being an average of a plurality of digital sensor outputs stored in memory is met by the averaged output from the conditioning circuits(65,66, column 7, lines 19-42). Furthermore it would have been obvious that the microprocessor causes the display of the operating status of the

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light no matter what condition is occurring with the light since it is based on the light current calculation(see: column 8, lines 3-7).

-- With regards to **claim 30**, the claimed subject matter that is met by Stegman includes:

1) the battery and battery voltage is met by the battery(56, column 5, lines 19-39).

Although the battery status lamp is not taught by Stegman, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a battery status lamp into the display(77), since the batter voltage variance is monitored and the status of the voltage corresponding to the lights(55) is detected such that a fault is indicated based on voltage level(see: column 5 lines 34-40).

-- **Claims 32-40** recite methods that are met as discussed with reference to the discussion of the claims 6-29 above.

Allowable Subject Matter

5. **Claims 31 and 41-45** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARYL C. POPE whose telephone number is (571) 272-2959. The examiner can normally be reached on M-TH 8:00-6:30.

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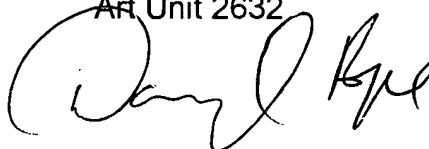
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DANIEL WU can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daryl C. Pope

June 26, 2005

DARYL C POPE
Primary Examiner
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A handwritten signature in black ink, appearing to read "Daryl C. Pope", is written over the printed name and title.